

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,013,301 B2  
APPLICATION NO. : 10/668926  
DATED : March 14, 2006  
INVENTOR(S) : Frode Holm et al.

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**On the Title Page**

The title page should be deleted and substitute therefor the attached title page.

(56) References Cited                      Delete "FoodFit.com",  
Other Publications, pg. 2, Col. 2        Insert --FoodFit.com--  
Internet Papers; <http://www.foodfit.com>;

**In the Claims**

Column 10, line 5, Claim 1	After "decomposition", Insert --(SVD)--
Column 10, line 7, Claim 1	Delete "wherein A", Insert --wherein SVD (A)--
Column 10, line 34, Claim 4	After "decomposition", Insert --(SVD)--
Column 10, line 36, Claim 4	Delete "wherein A", Insert --wherein SVD (A)--
Column 10, line 37, Claim 4	Delete "S in", Insert --S is--
Column 10, line 47, Claim 4	After "database", Insert --is--
Column 10, line 64, Claim 7	After "decomposition", Insert --(SVD)--
Column 10, line 66, Claim 7	Delete "wherein A", Insert --wherein SVD (A)--
Column 11, line 1, Claim 7	Delete "S in", Insert --S is--
Column 11, lines 8-9, Claim 7	Delete "in formation stored in a database for the audio piece identified", Insert --information stored in a database for the audio piece is identified--

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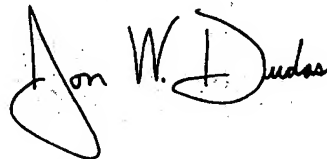
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**In the Claims** (cont'd)

Column 11, line 39, Claim 12	After "decomposition", Insert --(SVD)--
Column 11, line 40, Claim 12	Delete "wherein A", Insert --wherein SVD (A)--
Column 11, line 41, Claim 12	Delete "S' in", Insert --S' is--
Column 12, line 2, Claim 17	Delete "piece limited", Insert --piece is limited--
Column 12, line 30, Claim 21	After "decomposition", Insert --(SVD)--
Column 12, line 31, Claim 21	Delete "wherein A", Insert --wherein SVD (A)--
Column 12, line 32, Claim 21	Delete "S' in", Insert --S' is--
Column 12, line 57, Claim 26	Delete "piece limited", Insert --piece is limited--

Signed and Sealed this

Fourth Day of September, 2007



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
Holm et al.

(10) Patent No.: **US 7,013,301 B2**  
(45) Date of Patent: **Mar. 14, 2006**

(54) **AUDIO FINGERPRINTING SYSTEM AND METHOD**

(75) Inventors: Frode Holm, Santa Barbara, CA (US);  
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(73) Assignee: Predixis Corporation, Montrovia, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 122 days.

(21) Appl. No.: 10/668,926

(22) Filed: Sep. 23, 2003

(65) Prior Publication Data  
US 2005/0065976 A1 Mar. 24, 2005

(51) Int. Cl.  
G06F 17/30 (2006.01)

(52) U.S. Cl. 707/9; 707/3; 707/102;  
707/103

(58) Field of Classification Search 707/100,  
707/103 R, 3, 9, 102, 103; 713/170, 178  
See application file for complete search history.

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(57)

**ABSTRACT**

An audio fingerprinting system and method. A server receives an audio fingerprint of a first audio piece, searches a database for the audio fingerprint, retrieves an audio profile vector associated with the audio fingerprint, updates user preference information based on the audio profile vector, and selects a second audio piece based on the user preference information. The audio fingerprint is generated by creating a matrix based on the frequency measurements of the audio piece, and performing a singular value decomposition of the matrix. To expedite the search of the database and to increase matching accuracy, a subset of candidates in the database is identified based on the most prominent musical notes of the audio piece, and the search is limited to the identified subset. One of the attributes of the audio profile vector is a particular audio class. An identifier for the audio class is generated based on an average of audio fingerprints of the audio pieces belonging to the audio class.

26 Claims, 7 Drawing Sheets

